

**510(K) Summary**  
**NESS Children System**  
**510(k) Number K 024279**

FEB 05 2003

**Applicant's Name:**

N.E.S.S. Neuromuscular Electrical Stimulation Systems Ltd.  
19 Ha-Haroshet Street  
Kiedar Center, Suite 207  
P.O. Box 2500, Industrial Zone  
Ra'anana 43465  
ISRAEL  
Tel: 011-972-9-7485738  
Fax: 011-972-9-7485740

**Contact Person:**

Orly Maor  
Push-med Ltd.  
117 Ahuzah St.  
Ra'anana 43373, Israel  
Tel: 972-9- 7718130  
Fax: 972-9-7718131  
orly@push-med.com

And/or

Jonathan S. Kahan, Esq.  
Hogan & Hartson, L.L.P.  
Columbia Square  
555 Thirteenth Street, NW  
Washington, DC 20004-1109  
Tel: (202) 637-5794  
Fax: (202) 637-5910

**Date Prepared:**

December, 2002

**Trade Name:**

NESS Children System

**Classification Name:**

Powered Muscle Stimulators

**Classification:**

The FDA has classified Powered muscle stimulators devices as class II devices (product code 89 IPF, Regulation No. 890.5850) and they are reviewed by the Restorative Devices Branch .

**Predicate Device:**

Ness System cleared under K022776

**Performance Standards:**

No performance standards have been established for powered muscle stimulators under section 514 of the FDC Act. No special controls apply.

**Indications:**

The NESS Children System is intended for pediatric use for the following indications: maintenance or increase of range of motion, reduction of muscle spasm, prevention or retardation of disuse atrophy, muscle reeducation, and increasing local blood circulation.

**Device Description:**

The NESS Children System is a portable, one-channel electrical neuromuscular stimulator for personal use. The stimulator, which is powered by rechargeable nickel-cadmium batteries,

serves surface electrodes held on to the limb by a splint. A selection of four splints for the hand and forearm, the arm, the thigh, or the leg is provided in three sizes each to fit children dimensions.

A single channel of constant-voltage symmetrical biphasic Russian waveform stimulation is delivered to the muscles through surface electrodes. Microprocessor-controlled switching of the stimulation between these electrodes allows the muscles to be activated in combinations either cyclically or continuously. The stimulation is ramped up at the beginning and down at the end of each cycle.

The electrode locations allow the NESS Children System to provide extension and flexion of the limb segment distal to that of the splint. The user can select from five stimulation programs by pressing the mode button on the control unit and can increase or decrease the stimulation intensity in ten discrete levels.

**Substantial Equivalence:**

NESS Ltd. believes that the NESS Children System is substantially equivalent to its predicate device cited above without raising new safety and/or effectiveness issues.



FEB 05 2003

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Neuromuscular Electrical Stimulation Systems, Ltd.  
C/O Jonathan S. Kahan  
Hogan & Hartson, L.L.P.  
Columbia Square  
555 Thirteenth Street, NW  
Washington, D.C.

Re: K024279

Trade/Device Name: NESS Children System  
Regulation Number: 21 CFR 890.5850  
Regulation Name: Powered Muscle Stimulator  
Regulatory Class: Class II  
Product Code: IPG  
Dated: December 23, 2002  
Received: December 23, 2002

Dear Mr. Kahan:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

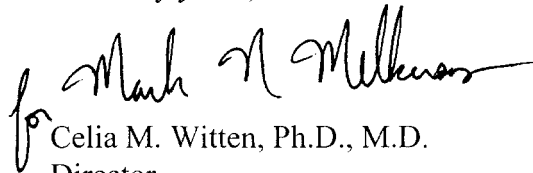
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set

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forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050. This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten".

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative  
and Neurological Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

## INDICATIONS FOR USE

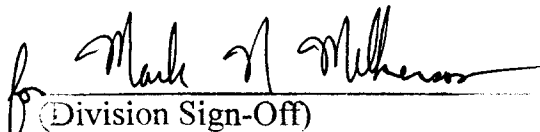
**510(k) Number (if known):** \_\_\_\_\_

**Device Name:** Ness Children System

**Indications for Use:** The NESS Children System is intended for pediatric use for the following indications: maintenance or increase of range of motion, reduction of muscle spasm, prevention or retardation of disuse atrophy, muscle reeducation, and increasing local blood circulation.

(PLEASE DO NOT WRITE BELOW THIS LINE -CONTINUE ON ANOTHER PAGE IF NEEDED)

510(k) Number \_\_\_\_\_

  
(Division Sign-Off)

Division of General, Restorative  
and Neurological Devices

510(k) Number \_\_\_\_\_

K024279

Prescription Use \_\_\_\_\_  
(Per 21 CFR 801.109)

OR

Over the Counter  
Use \_\_\_\_\_